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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,253	10/09/2003	Kazumasa Fukazawa	44470-316448	7520

23646 7590 08/06/2007
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EXAMINER	
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ART UNIT	PAPER NUMBER
3671	

MAIL DATE	DELIVERY MODE
08/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary	**Application No.** 10/681,253	**Applicant(s)** FUKAZAWA ET AL.
	Examiner Jamie L. McGowan	**Art Unit** 3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 May 2007*.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *19-35 and 37-43* is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *19-35 and 37-43* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a)☐ All b)☐ Some * c)☐ None of:
1.☐ Certified copies of the priority documents have been received.
2.☐ Certified copies of the priority documents have been received in Application No. _____.
3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 19-21, 27-30, and 34 rejected under 35 U.S.C. 102(b) as being anticipated by Joscher et al. (3,978,938).

Regarding claim 19, Joscher et al. discloses a work vehicle comprising:

- A vehicle frame having a front, a middle and a rear alighted along a longitudinal axis, the front, middle, and rear being defined in accordance with a travel direction
- A vehicle drive module supporting the vehicle frame
- An engine cover (44) covering an engine at the front of the vehicle frame, the engine cover being downwardly angled from a rear end oriented with the rear of the vehicle frame and a front end oriented with the front of the vehicle frame
- A seat (36) for an operator secured to the vehicle frame, at the middle, behind the engine and engine cover
- A work apparatus (12) disposed in front and connected to the front of the vehicle frame such that a lowest point the work apparatus and a lowest point of the vehicle drive module are generally on a horizontal plane and a top center portion of the work apparatus is visible from an eye point above the seat (36)
- A cooling module (52) for cooling the engine, the cooling module connected to the frame not between the eye point and the work apparatus

Regarding claim 20, the eye point is of an operator in the seat.

Regarding claim 21, the vehicle further comprises a cab (34) for an operator secured to the middle of the frame behind the engine cover wherein the seat and the eye point are in the cab (figure 1).

Regarding claims 27 and 28, the top of the engine cover (44) is angled downward from the rear of the engine cover towards the front of the engine cover (44) at an angle of about 23 degrees or more relative to a horizontal line (Figure 1).

Regarding claims 29 and 30, the engine cover (44) provides a lowest line of sight forward from the eye point in the cab (34) of about 23 degrees or more below a horizontal line.

Regarding claim 34, the engine cover (44) is generally closed.

3. Claims 19-21, 27-31, and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Kowalik (3,451,494).

Regarding claim 19, Kowalik discloses a work vehicle comprising:

- A vehicle frame having a front, a middle and a rear alighted along a longitudinal axis, the front, middle, and rear being defined in accordance with a travel direction
- A vehicle drive module supporting the vehicle frame
- An engine cover (12) covering an engine (44) at the front of the vehicle frame, the engine cover being downwardly angled from a rear end oriented with the rear of the vehicle frame and a front end oriented with the front of the vehicle frame
- A seat for an operator secured to the vehicle frame, at the middle, behind the engine and engine cover

- A work apparatus (28) disposed in front and connected to the front of the vehicle frame such that a lowest point the work apparatus and a lowest point of the vehicle drive module are generally on a horizontal plane and a top center portion of the work apparatus is visible from an eye point above the seat (36)
- A cooling module (84,86) for cooling the engine, the cooling module connected to the frame not between the eye point and the work apparatus

Regarding claim 20, the eye point is of an operator in the seat.

Regarding claim 21, the vehicle further comprises a cab (82) secured to the middle of the frame behind the engine cover, wherein the seat and the eye point are in the cab.

Regarding claims 27 and 28, the top of the engine cover is angled downward from the rear of the engine cover towards the front of the engine cover at an angle of about 23 degrees or more relative to a horizontal line (Figure 2).

Regarding claims 29 and 30, the engine cover provides a lowest line of sight forward from the eye point in the cab (82) of about 23 degrees or more below a horizontal line.

Regarding claim 31, the work apparatus is a bulldozer blade and the vehicle drive module is a track frame module.

Regarding claim 34, the engine cover is generally closed.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 22-26, 32, 33, 35, and 37-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joscher et al. in view of Pack (6,793,028).

Regarding claims 22, 23, and 35, Joscher et al. discloses the vehicle as described above but fails to disclose that the cooling module could be mounted at the rear end of the machine. Like Joscher et al., Pack discloses an engine driven vehicle with a cooling module. Unlike Joscher et al., Pack teaches that it is known in the vehicle art to position the vehicle cooling module outside the engine compartment and behind the operator's cab. It would have been obvious to one of ordinary skill in the art at the time the invention was made to move the cooling module of Joscher et al. behind and below the cab as taught by Pack as an alternate arrangement to allow the engine compartment to be made smaller thereby giving the operator even greater visibility.

Concerning the limitations regarding the use and position of a first hydraulic tank and a second fuel tank, the examiner takes Official Notice that although Joscher et al. does not disclose the use and position of hydraulic and fuel tanks, these tanks are inherently used in modern work machines. Regarding the position of the tanks, it is the examiner's position that it would have been an obvious matter of design choice to position the fuel and hydraulic tanks in the specified positions since applicant has not disclosed that having tanks in the claimed positions solves any stated problem or is for any particular purpose and it appears that the work machine would perform equally well with the tanks positioned anywhere on the vehicle that does not interfere with its operation (including operator view, vehicle stability and implement positioning). Similarly, concerning the position of an plurality of conduits connected between the engine and cooling module, it would have been an obvious matter of design choice to position the conduits as claimed since applicant has not disclosed that having conduits positioned within the vertical positions of the vehicle frame solves any stated problem or is for any particular purpose and it appears that the work machine would perform equally well with the conduits positioned along any portions of the vehicle that would not interfere with the operation of the vehicle. Additionally, the examiner notes that although Joscher et al. does not show conduits between the engine and the cooling module, such is inherently used in modern work vehicles as shown in Pack (Fig. 1).

Additionally, regarding the limitations directed to the exhaust pipe extending from a lateral side or an upper surface of the engine cover.

It would have been an obvious matter of design choice to modify the vehicle of Joscher et al. by having the exhaust pipe extend from a lateral side or an upper side of the engine cover since the applicant has not disclosed that having the exhaust pipe extend from a lateral side or an upper side of the engine cover solves any stated problem or provides any unexpected results, and it appears that the vehicle would perform equally well with the exhaust pipe extending from any side of the engine cover that does not interfere with the function of the vehicle.

6. Claims 22-26, 32, 33, 35, and 37-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kowalik (3,451,494) in view of Pack (6,793,028).

Regarding claims 22, 23, and 35, Kowalik discloses the vehicle as described above but fails to disclose that the cooling module could be mounted at the rear end of the machine. Like Kowalik, Pack discloses an engine driven vehicle with a cooling module. Unlike Kowalik, Pack teaches that it is known in the vehicle art to position the vehicle cooling module outside the engine compartment and behind the operator's cab. It would have been obvious to one of ordinary skill in the art at the time the invention was made to move the cooling module of Kowalik behind and below the cab as taught by Pack as an alternate arrangement to allow the engine compartment to be made smaller thereby giving the operator even greater visibility.

Concerning the limitations regarding the use and position of a first hydraulic tank and a second fuel tank, the examiner takes Official Notice that although Kowalik does not disclose the use and position of hydraulic and fuel tanks, these tanks are inherently used in modern work machines. Regarding the position of the tanks, it is the examiner's position that it would have been an obvious matter of design choice to position the fuel and hydraulic tanks in the specified positions since applicant has not disclosed that having tanks in the claimed positions solves any stated problem or is for any particular purpose and it appears that the work machine would perform equally well with the tanks positioned anywhere on the vehicle that does not interfere with its operation (including operator view, vehicle stability and implement positioning). Similarly, concerning the position of an plurality of conduits connected between the engine and cooling module, it would have been an obvious matter of design choice to position the conduits as claimed since applicant has not disclosed that having conduits positioned within the vertical positions of the vehicle frame solves any stated problem or is for any particular purpose and it appears that the work machine would perform equally well with the conduits positioned along any portions of the vehicle that would not interfere with the operation of the vehicle. Additionally, the examiner notes that although Kowalik does not show conduits between the engine and the cooling module, such is inherently used in modern work vehicles as shown in Pack (Fig. 1).

Additionally, regarding the limitations directed to the exhaust pipe extending from a lateral side or an upper surface of the engine cover.

It would have been an obvious matter of design choice to modify the vehicle of Kowalik by having the exhaust pipe extend from a lateral side or an upper side of the engine cover since the applicant has not disclosed that having the exhaust pipe extend from a lateral side or an upper side of the engine cover solves any stated problem or provides any unexpected results, and it appears that the vehicle would perform equally well with the exhaust pipe extending from any side of the engine cover that does not interfere with the function of the vehicle.

Response to Arguments

7. Applicant's arguments with respect to claims 19-43 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamie L. McGowan whose telephone number is (571)272-5064. The examiner can normally be reached on Monday through Friday 8:00 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on (571)272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jamie L. McGowan
August 1, 2007

Thomas B. Will
Supervisory Patent Examiner
Group 3600